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**Cc:** []

**From:** CN=Richard Mylott/OU=R8/O=USEPA/C=US

**Sent:** Fri 12/7/2012 5:52:51 PM

**Subject:** 2 articles Casper Star Tribune and Greenwire - Pavillion driller blasts EPA contamination findings

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[By ADAM VOGUE Star-Tribune energy reporter](#)

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fyi. two articles below.

Encana calls on EPA to abandon Pavillion test wells

Print Email

12 hours ago • By ADAM VOGUE Star-Tribune energy reporter

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The company in the center of a groundwater contamination debate thinks the U.S. Environmental Protection Agency should abandon its monitoring wells near Pavillion and refocus its investigation. Officials representing Encana Oil and Gas said on a conference call Thursday that the federal agency's investigation into whether natural gas production has contaminated groundwater in the Pavillion gas field is flawed and needs a clean start.

The call was scheduled two days before the one-year anniversary of an EPA report tentatively linking hydraulic fracturing to groundwater contamination east of Pavillion. During the call, company officials were critical of EPA methods used in the drilling, collection and sampling processes used by the agency to test local groundwater.

"The EPA should withdraw its draft report," said David Stewart, environmental, health and safety lead for Encana's Wyoming operations. "The data is inaccurate and their conclusion is not supported by the data." The agency didn't respond directly to the company's requests Thursday, but issued a statement detailing its history in the Pavillion field. The agency added that it is accepting comments on the Pavillion investigation until Jan. 15 and that investigation data will be peer-reviewed.

The EPA drilled two monitoring wells in the Pavillion gas field in summer 2010 in response to complaints about local drinking water. The agency hoped to ascertain whether oil and gas development surrounding several rural homes east of Pavillion was the cause of contamination.

The agency released a draft report in December 2011 tentatively linking the industry's use of hydraulic fracturing, also known as fracking, to water contamination. Encana has criticized EPA's placement and depth of the wells, the methodology employed in drilling and the evidence cited by the EPA in its report. The agency agreed to re-test the area this year after criticism from the state and Encana. The U.S. Geological Survey conducted the second test and released test data this fall, but without interpretation. Both the agency and Encana have since claimed that the newly gathered data back their opposing claims.

Encana said the focus of the investigation is one of the company's larger problems with what the EPA's done in the Pavillion area.

"This has been a misguided response," Stewart said.

Stewart said the agency drilled monitoring wells that were far too deep rather than following up on tests of domestic water wells, which Encana believes indicate the real problem in the gas field.

"Most wells sampled exceeded palatability criteria," he said. "Yet the EPA decided not to respond to or investigate or understand why those exceedances were occurring."

Stewart also questioned several "assumptions," which he said the EPA must have made while drafting its report. He said the agency's report indicates it used false information about water flow direction, a sign of failure to understand the geology of the field. According to Stewart, the agency drilled a monitoring well into one geologic formation which the company targeted.

"Hydrocarbons have always been there," he said. "That's why we drilled there in the first place."

Stewart said the company hopes the agency will abandon its deep monitoring wells in the area and shift its attention back to domestic wells.

"Domestic well samples need to be looked at more from a bacterial standpoint, what's contributing to taste, odor and palatability problems," he said. "That was not done."

Data from the EPA and USGS tests in the area -- which is several miles east of the town of Pavillion -- is expected to be peer-reviewed sometime shortly after the public comment period closes in January.

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----- Forwarded by Richard Mylott/R8/USEPA/US on 12/07/2012 10:49 AM -----

From: Jose Zambrana/DC/USEPA/US

To: Ayn Schmit/R8/USEPA/US@EPA, Richard Mylott/R8/USEPA/US@EPA

Date: 12/07/2012 07:53 AM

Subject: Fw: Greenwire - Pavillion driller blasts EPA contamination findings

i'm sure you guys saw this . . .

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#### HYDRAULIC FRACTURING:

Pavillion driller blasts EPA contamination findings

Ellen M. Gilmer, E&E reporter

Published: Friday, December 7, 2012

Encana Corp., fighting accusations that its gas wells contaminated drinking water in Pavillion, Wyo., is calling on U.S. EPA to withdraw a draft report that linked hydraulic fracturing in Wyoming to groundwater contamination there.

Encana interpretation of test well results

Encana compares U.S. EPA and U.S. Geological Survey results from a monitoring well in Wyoming and speculates on why certain compounds were detected.

Compound Detected by USGS Detected by EPA Comments

Methane Yes Yes Main component of natural gas

Propane Yes Yes Component of natural gas

Ethane Yes Yes Component of natural gas  
 Benzene No No --  
 Toluene No No --  
 Xylenes No No --  
 Acetone No Yes Lab contaminant  
 4-Methyl-2-pentanone No Yes Lab contaminant  
 Benzoic acid Yes Yes Naturally occurring; leaches from PVC plastics  
 Isopropyl alcohol No Yes Lab contaminant  
 Phenol Yes Yes Naturally occurring; leaches from PVC plastics  
 Diethylene glycol No Yes Likely a false positive; component of plastics  
 Triethylene glycol No Yes Likely a false positive; component of plastics  
 Tetraethylene glycol No Yes Likely a false positive; component of plastics  
 2-Butoxyethanol No Yes Likely a lab error; component of metal cutting oil  
 Nonylphenol No Yes Found in equipment cleaners or lab contaminant  
 Octylphenol No Yes Found in equipment cleaners or lab contaminant

Chart courtesy of Encana.

Encana, the main driller in the Pavillion field, said in a press call yesterday that any contaminants detected in EPA's monitoring wells were either naturally occurring or were introduced by the agency during "sloppy" well construction or lab testing.

EPA drilled two monitoring wells after homeowners near the oil field complained about foul water they began noticing in 2005. In a draft report released a year ago, the researchers said they had found fluid from fracking not in drinking water, but in deep groundwater.

Encana's David Stewart, who handles environment, health and safety issues in Wyoming, said EPA's analysis of deep groundwater was misguided, and "EPA should withdraw the draft report." He said the agency was assuming natural gas development was the culprit instead of considering naturally occurring contaminants and other sources.

The criticism is similar to that voiced recently by the American Petroleum Institute (EnergyWire, Oct. 19).

The U.S. Geological Survey used EPA's wells to conduct its own study, which replicated some of EPA's results but not others. And it threw out data from one of the monitoring wells due to low flow rates. That well had shown the presence of benzene at 49 times EPA's maximum contaminant level.

Some compounds, including three types of glycols, were detected by EPA but not USGS in the other well. Encana said the EPA results were likely false positives. EPA has defended its testing methods and reiterated today that USGS's data is "generally consistent" with its own findings released in the draft report. The agency declined to comment this week on Encana's allegations of faulty testing methods.

Both federal agencies detected methane, propane and ethane in the deep groundwater. All are components of natural gas that Encana says are naturally occurring. They also both detected phenol and benzoic acid. The company contends that those also occur naturally and leach from polyvinyl chloride plastics used by EPA to construct the monitoring wells.

"The important point is that these are naturally occurring and have existed in these zones for eons. Encana didn't put them there; nature did," company spokesman Doug Hock said in an email.

Stewart acknowledged that robust base-line water quality information would have headed off many of the discrepancies over whether compounds are natural or drilling-related. Encana now has a standard practice of examining base-line data for groundwater in all oil and gas plays and new wells, he said.

Reporter Mike Soraghan contributed